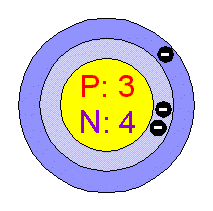
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Periodic Families Homework**

1. Which element is in group 4 period 5? \_\_\_\_\_\_\_
2. How many elements are in period 4? \_\_\_\_\_\_\_\_
3. How many elements are in period 6? \_\_\_\_\_\_\_\_
4. How many metals are in group 14? \_\_\_\_\_\_\_\_\_
5. The majority of the elements in the periodic table are (metals/nonmetals). *(Circle one)*
6. The father of the periodic table is named \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. As you go from left to right across the periodic table, the elements go from (metals/nonmetals) to (metals/nonmetals). *(Circle the answers)*
8. Element X has a metallic shine, is located in the 4th period, and is an alkaline earth metal. Which element is it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Element Y is not shiny, has 6 protons, and is frequently called the “building block of life.” Which element is it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Which of the following statements about metals is correct?
    * 1. They are ductile but not shiny
      2. They conduct electricity but are not ductile
      3. They do not conduct electricity and are not shiny
      4. They conduct electricity and are malleable
11. The diagram below represents the Bohr model of an element. Which of the following is true?
    1. The element is located in period 1 and is a group 2 metal
    2. The element is located in period 1 and is an alkali metal
    3. The element is located in period 2 and is an alkali metal
    4. The element is located in period 2 and is a halogen
12. Complete the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| Element | Properties | Real Name | Periodic Family |
| A | This metal reacts vigorously with water and is period 3 |  |  |
| B | This nonmetal is located in period 3 and is used to disinfect and kill bacteria in pools |  |  |

**Periodic Table Vocabulary**

Choose the correct words from the list, then place the appropriate number in each blank.

**Word List:**

1. Alkali metals
2. Alkaline earth metals
3. Atomic mass
4. Atomic number
5. Family
6. Group
7. Halogens
8. Metal
9. Metalloids
10. Noble gases
11. Nonmetal
12. Period
13. Periodic law
14. Periodic table
15. Transition metals

Dmitri Mendeleev developed a chart of the elements called the . He said that if the elements were listed in order of increasing , their properties repeated in a regular manner. He called this the of the elements. The arrangement used today is different than Mendeleev’s because the elements are arranged in order of increasing . Each horizontal row of elements is called a . Each vertical column is called a \_\_\_\_\_\_, or , because of the similarities between elements in the same column, a \_\_\_\_\_\_\_.

In rows 4 through 7, there is a wide central section containing elements that are called . Each of the elements to the left of the staircase line of the chart, is classified as a . Each of the elements at the right side of the staircase line is classified as a . The elements between these two main types, with some properties of one type and other properties of the other type, are called . The elements in group 1 are called \_\_\_\_\_\_. The elements in group 2 are called . The elements in group 17 are called \_\_\_\_\_\_\_\_ and the elements in group 18 are called \_\_\_\_\_\_\_\_.